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Reported Mental Health Issues and Marital Quality: A Statewide Survey

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REPORTED MENTAL HEALTH ISSUES AND MARITAL QUALITY:

A STATEWIDE SURVEY

by

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ABSTRACT

Reported Mental Health Issues and Marital Quality:

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by

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This study included a representative random sample of 886 married individuals in Utah. This sample was surveyed to discover the relationship between demographic variables, reported mental health issues, and marital quality. In addition, this study sought to discover models, using demographic variables and reported mental health issues, to predict for separate dimensions of marital quality. This survey was a replication of a study completed primarily in Oklahoma, with the addition of questions about the participants' mental health.

Spearman's rho, Pearson's *R*, and multiple regression were used to analyze the data. The results of the study show that: religious beliefs had a statistically significant relationship with commitment/satisfaction, with stability, and negative interactions. Religious activity had a statistically significant relationship with commitment/satisfaction, and negative interactions. The duration of marriage had a statistically significant relationship with stability, negative interactions, and age at time of

current marriage. The models found for predicting the separate dimensions of marital quality including commitment and satisfaction, stability, and negative interactions were all robust. Implications and recommendations are discussed.

(76 pages)

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Joseph Smart

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CHAPTER 1

INTRODUCTION

The marital relationship influences a person's quality of life uniquely, as no other relationship can (Whisman, Sheldon, & Goering, 2000). For this reason the quality of one's marriage is an important topic for researchers. Publications that focus on marital quality are numerous and every year the number of articles, books, and studies increases (Bradbury, Fincham, & Beach, 2000). Marital quality is important to understand because when it is poor, those in the marriage suffer as well as their children and society. Poor marital quality is associated with many family and community problems (Bradbury et al.; Rogers & Amato, 1997). Mental health issues, poor academic performance, and at-risk behaviors associated with drug use and violence are observed in children who are raised in marriages with poor marital quality (Cummings & Davies, 1994; Emery, 1982; Goering, Lin, Campbell, Boyle, & Offord, 1996; Grych & Fincham, 1990; Whisman, 1999).

Marital quality is not the only factor known to influence so many people; in addition, to marital quality, mental health issues affect 50% of the population (Kessler et al., 1994). Research validated the theory that individuals suffering from mental health issues, dealing with anxiety, depression, and substance use, report significantly decreased marital quality than those who do not suffer from these mental health issues (Goering et al., 1996). The verification that marital quality and mental health are related is the first step in understanding these problems in order to intervene appropriately. This relationship between marital quality and mental health issues sets the stage for additional

research to do that. Researchers have sought to discover the connection between mental health and marital quality, yet very little has been done to tease out the relationship between mental health issues and the various dimensions of marital quality.

While the relationship between marital quality and mental health issues remains of central importance to this study, there are also demographic variables that correlate significantly with marital quality and mental health. These demographic variables include sex, age at marriage, duration of marriage, economic problems, religious belief and religious activity. The following are examples of studies that have investigated the correlation of these demographic variables with marital quality and mental health issues. Williams (2003) reported that past studies found there was an inverse relationship between marital quality and mental health problems for women and not men. She found no difference between men and women, and attributes the difference between her research and past research to cultural shifts. Poor marital quality is correlated highly with early age at marriage (Martin & Bumpass, 1989). In addition, marital quality significantly drops early in the marriage and should be accounted for (Glenn, 1989). Economic hardship is also correlated with decreased marital quality for women (Conger et al., 1990). Religiosity can be broken down into two variables, religious activity and religious belief, and each may have a unique relationship with marital quality. Walsh (1998) has argued that religious beliefs add resilience to individuals in times of trouble.

Concept Definitions

Marital quality, mental health issues, and demographic variables are the factors considered in this study. Marital quality as defined by Glenn (1990) is a measure taken at

one point in time to rate how an individual feels about different areas of their marriage. Mental health issues in this study include depression, anxiety, and alcohol and/or drug abuse. These mental health issues are included because they are the most commonly found in society (Kessler et al., 1994). These mental health issues will be discussed further in the review of literature. Sex in this study refers to the biological sex of an individual. Duration of the marriage refers to the length of time a couple has been married. Age at marriage denotes the age an individual was when he/she got married. Economic problems denotes financial struggle and is measured by an individual receiving government aid. Religious belief refers to strength of the devotion an individual experiences with regard to their spiritual precepts (Walsh, 1998). Religious activity denotes how active an individual is in attending their worship service and meetings.

Rationale for Current Research

The unique relationship between mental health issues and marital quality has been researched often over the past several years (Goering et al., 1996; Snyder & Whisman, 2004; Whisman, 1999; Whisman et al., 2000). The relationship between marital quality and mental health issues is recognized in general, but the specific parts of marital quality that relate to each mental health issue have not been clarified. Understanding which dimensions of marital quality relate to different mental health issues is important because this would allow mental health professionals to intervene on two levels. Mental health professionals could provide interventions to address the symptoms of the mental health issue, and poor marital quality. The symptoms of alcohol and drug abuse are different from the symptoms of depression, and have separate treatments. Therefore, if one mental

health issue, such as depression, has unique symptoms associated with it, it follows that each mental health issue's relationship with marriage quality may also be distinct. However, the research done to clarify which components of marital quality correlate with separate mental health issues is lacking. This data is important to clinicians who attempt to treat individuals and marriages. Armed with the results, they could more effectively discover and treat the areas of the marital relationship that suffer most when a specific mental health issue is present.

Conceptual Framework

The complexities of a marital relationship are difficult to understand without a robust conceptual framework. As a frame of reference, systems theory is capable of accounting for the many variables and relationships within marriage, and is the conceptual framework used for this study. The complexity found in relationships such as marriage, was noted and recorded by Democritus, a Greek philosopher who lived from 460 to 360 B.C. (White & Klein, 2002). He noted that the whole is greater than the sum of the parts. This concept has evolved and today this idea is referred to as nonsummativity. Nonsummativity makes clear that patterns of behavior, feedback, interactions, and other phenomena within a system appear only when the parts are together, and are not seen when the parts are separated (Hanson, 1995). Nonsummativity makes clear that each individual is interconnected to others, especially within the marital relationship. Triumphs and tribulations of one partner will affect the other. The influence is especially evident when mental health issues are present (Whisman et al., 2000). Change occurs in a person through interaction with our individual thought or reason, associations, and environment

or context; individuals being closer have a greater influence. Placed in a systems framework marital quality could not properly be understood without understanding other parts of the system. These parts include mental health issues and demographic variables, because without these variables, the larger picture and context cannot be understood. Marital quality does not exist separately from these other variables. Using this systemic model, Snyder and Whisman (2004) accounted for the mutual influence of mental health issues and poor marital quality by claiming that each affects the other in a bidirectional and reciprocal manner.

Extending the concept of nonsummativity, another important assumption of systems theory is found: the assumption that understanding is only possible by viewing the whole (White & Klein, 2002). If a system is greater than the sum of its parts, then understanding a system cannot be complete by studying the parts -- even each part in isolation (White & Klein). Following this line of reasoning, the more variables accounted for while studying marital quality, the more accurate the picture that emerges of the individual.

Hanson (1995) explained that through feedback, each system changes or maintains the individuals within it. Feedback is the communication or information flow within the system, which acts to maintain or change the system's patterns of interaction. This feedback is a circular loop that brings the system's output back to the system as input, influencing the actions of the individuals in the system. This concept, applied to marriage, would place a husband and wife in more or less fixed patterns of interaction; when one of the partner's actions is not within the prescribed behavior of the system, the other partner will give feedback to try to correct the course of behaviors back to the

established pattern. This feedback, given to correct the patterns of interaction, can often correct the behavior, but in many cases it can have the opposite effect and behaviors can spiral out of control. This idea applied to marital quality and mental health issues suggests that a marriage that is spiraling downward, with marital quality decreasing, could influence an increase in mental health issues, and further decreased marital quality. Or, mental health issues start the downward spiral, and influence and be influenced by worsening marital quality. Significant correlations have been found between marital quality and mental health issues (Goering et al., 1996; Whisman, 1999), and correlations have been found to strengthen over time (Snyder & Whisman, 2004). Viewing the marital relationship through systems theory allows for a greater understanding, and for more variables to be considered. Systems theory also addresses seemingly fixed patterns of as interaction influenced by mental health issues and how these altered patterns interplay with aspects of the system.

Purpose and Objectives of the Research

The purpose of the current research was to examine the association of mental health issues and separate components of marital quality, while accounting for several demographic variables that also influence marital quality. There were three objectives for this study: first, to discover if there is a relationship between sex, age at the time of current marriage, duration of current marriage, economic problems, religious belief, religious activity, and marital quality. Second, to determine if a relationship between mental health issues and marital quality exist. The last objective was to determine if there is a relationship between sex, age at the time of current marriage, duration of

current marriage, economic problems, religious belief, religious activity, mental health issues, and marital quality.

By assessing the interplay of these variables, a greater understanding of how mental health issues influence the complex issue of marital quality was gained. Using the information gained from the results couples and those who treat couples can have a greater ability to address the problems that come into a marriage when one of the partners suffers from a mental health issue.

CHAPTER II

LITERATURE REVIEW

This chapter reviews the importance of marital quality and related research. Each of the variables identified in the introduction, marital quality, demographic variables, and mental health issues, are defined as well and the relationship between each of the variables is explored. This chapter presents the research questions and hypotheses that guided this study.

Marital Quality

Each year, the attention scholarly writers give to the topic of marital quality increases (Bradbury et al., 2000). There are several reasons for the breadth of research but the biggest factor appears to be the several problems associated with poor marital quality, including divorce (Bradbury et al.; Rogers & Amato, 1997). The National Marriage Project (1999), used data from the United States Bureau of the Census to predict that around half of all marriages would end in divorce. Rogers and Amato found a correlation between poor marital quality and divorce. Decreased marital quality relates to poor outcomes for children, including increased rates for mental health problems (Goering et al., 1996; Whisman, 1999), decreased academic performance, and several kinds of acting out behavior (Cummings & Davies, 1994; Emery, 1982; Grych & Fincham, 1990). Conversely, according to Stack and Eshleman (1998), who used the World Values Study Group data distilled from observing 18,000 adults in 17 countries, there is a direct correlation between individual and societal benefits and an intact family

reporting higher marital quality. These benefits include financial security, greater physical health, longer lives, and decreased rates of depression and other mental health problems. Marital quality is generally captured by pen and paper tests wherein partners are asked to rate their relationship in the areas of judgments on marital quality, reports on specific behaviors, and general interaction patterns (Bradbury et al.). The purpose of many of these instruments is not only to do research, but to discover areas of issue in a therapeutic context.

Bahr, Chappell, and Leigh (1983) reported that marital quality, marital satisfaction, marital adjustment, and marital happiness are used interchangeably throughout the literature. In order to eliminate unneeded confusion, marital quality will be the term used for this variable throughout the study. Glenn (1990) explained that, historically, marital quality is conceptualized and consequently measured by two very different schools of thought. The first school of thought views marital quality as a characteristic of a marriage that can be observed and rated. The second school of thought views marital quality as the way married persons feel about their marriage, as opposed to what an outsider could observe. Glenn (1998) later revisited this dichotomy and reported that the only definition of marital quality that made sense to him was one created from the view of how an individual is feeling about their marriage. Spanier's (1976) research led him to add psychometric rigor to the study of marital quality and create a scale which combined dyadic satisfaction, dyadic cohesion, dyadic consensus, and affectional expression. Later, in research from a nationally representative sample of 1,845 married persons, Johnson, White, Edwards, and Booth (1986) found that combining the subscales could be misleading because separate dimensions of marital quality could be affected

independently by factors such as sex and marital duration. Johnson et al. performed a confirmatory factor analysis to discover that different dimensions (marital happiness, interaction, disagreements, problems and stability) of marital quality interact independently with separate demographic variables (sex, marital duration, and presence of children). For this reason, analysis was required on separate dimensions of marital quality.

Amato (2007) reported that the subscale of commitment must be accounted for in the study of marital quality. Amato reasoned that a couple could have a high degree of marital happiness and decreased negative interactions, but would divorce because their commitment was low. Amato explained that the omission of commitment is telling of a culture where expressive individualism and self are the foci, which are not central goals to a successful marriage. In order to stave off the hedonistic slant that has plagued past and present research, the concept of commitment must be considered a component of marital quality (Amato).

Taking this into consideration, the definition of marital quality used in this study was as follows: Marital quality is assessed through questions at one point in time about an individual's feeling with regard to his/her marriage. These questions addressed separate dimensions of marital satisfaction in order to account for the subscales of marital quality correlation with different demographic variables. These dimensions of marital quality included marital happiness or satisfaction, negative interaction (marital disagreement and marital problems), marital instability, and commitment.

Demographic Variables Associated with Marital Quality

The association between marital quality and mental issues was at the center of this study; however, demographic variables that correlate with marital quality were important to identify and acknowledge. Demographic variables were included because they correlate with marital quality, and needed to be accounted for to clarify the correlation between marital quality and mental health issues. Demographic variables included in this study were: sex, age at marriage, duration of marriage, economic problems, and religious beliefs and involvement.

Sex

Several changes have occurred in the last half a century with regard to male and female roles with an increase in women contributing to household income, husbands' taking on a share of household work, and a move towards a more egalitarian process of decision making (Amato, Johnson, Booth, & Rogers, 2003). With these cultural changes occurring in such a short period of time, Amato et al. reported that it was still unclear if those changes had served to decrease or increase marital quality. Much of the research accomplished in the area of sex and marital quality had focused on the macrocontexts of the increase of women in the work place and dual earner couples (Blair, 1998; Brennan, Barnett, & Gareis, 2001; Wilkie, Ferree, & Ratcliff, 1998). This body of research tended to focus on division of household work and its relationship with marital quality within the context of sex roles and cultural changes (Dillaway & Broman, 2001; Frisco & Williams, 2003; Helms-Erikson, 2001; Lavee & Katz, 2002; Stevens, Kiger, & Riley, 2001).

Research on marital quality and sex has centered on changes in sex roles in the face of huge cultural changes that have taken place over the last 40 years.

With these cultural changes, researchers have also begun to question long held beliefs about marital quality's separate effect on women and men. Williams (2003) explained that past research has maintained that marital quality and marital status correlated with psychological well-being differently for men and women. For women, psychological well-being was tied to marital quality, but for men, marital status is more important, being that married men report higher psychological wellness. Williams explained that this difference between men and women has rarely been questioned since it was established in the early 70s, while many things with regard to marriage have changed in that time. A study that confirms this hypothesis was completed by Horwitz, McLaughlin, and White (1998). They found that decreased marital quality increased the chances of the wife having mental health problems over the husband. This study, however, did not take into account multiple dimensions of marital quality. Williams explained that the effect of sex differences on marital quality varied with how it was measured. Williams analyzed three waves of a nationally representative survey with 2,348 participants and discovered that these traditionally held beliefs about the differences in men and women were not accurate for us today because being in a satisfying supportive marriage provides benefits to men and women equally, and divorce and poor marital quality create similar problems for both men and women. Williams tested the hypothesis that men's psychological well-being was tied to their marital status. She compared the categories of divorced or widowed men and the never-married men and found no significant difference between any of the groups. To test the other long

held hypothesis that marital quality is more closely tied to women's mental health, she compared the psychological well-being variables from time two with the variables that measured marital quality at time one. Again, she found there was no statistically significant difference between men and women with regard to earlier marital quality and later psychological well-being. Both groups showed positive benefits in psychological well-being if there was high marital quality during the first wave. William's results led her to report that, for the most part, the variables of marital status, marital transitions, and marital quality had the same effect on psychological well-being for men and women.

It should be noted that in her research, Williams (2003) did not account for anxiety issues or drug and alcohol issues, which are also threats to psychological well-being, and tend to be a larger problem among men. Adding strength to this argument, Simon (2002) researched similar variables but accounted for drug and alcohol use and abuse, and came to the same conclusion: the psychological benefits (decreased mental health issues) of marital status and psychological costs of divorce or never being married are equal for women and men. After an exhaustive review of studies on marital status and mental health, Waite and Gallagher (2000) found that the mental health benefits of being married were similar for men and women. Williams extended her research further to report that for both men and women, poor marital quality had an effect on psychological well-being equal to that of divorce and never being married, and in some cases, a greater effect.

While marital quality and marital status have similar outcomes for men and women, it is hypothesized that there is a difference between their feelings about the marital quality. Heaton and Blake (1999) found that women tended to be more aware of

the relational aspects of a marriage. Heaton and Blake analyzed longitudinal data from a national survey on 4,587 couples who, at wave 1 of the study, were married. They found the wives' perception of marital quality was more accurate for predicting couple outcomes of divorce. The women's earlier marital quality scores predicted more accurately for later divorce, even when men's scores showed no marital distress.

Based on the research, sex is an important variable to include in order to explore how it relates to marital quality and the other variables of interest. There is expected to be no difference on the effect of marital quality on psychological well-being for men and women. This expected outcome is based on Williams (2003) study, which shows that both males and females are influenced by marital problems.

Age at Marriage

The age of a person at the time they marry has been found to be one of the largest predictors of divorce and marital quality in the first five years of marriage (Amato & Rogers, 1997; Martin & Bumpass, 1989; South, 1995). Individuals marrying in their teens were twice as likely as older individuals to divorce or separate (Martin & Bumpass). From their study of 1,748 adults, Amato and Rogers report that when couples marry at younger ages (for this sample $M = 21.5$, $sd = 2.8$) they are more likely to report marital problems, especially infidelity and jealousy. Specifically, they reported that every year marriage was postponed there was an 11% decline in reported problems associated with jealousy, a 21% decline in reported problems associated with infidelity, and a 7% decline in reported problems associated with drinking and drug use problems. This implies that marriages between younger people tend to decreased marital quality and

the individuals are prone to relationships with others outside the marriage. Those who marry at a younger age are placed at a greater risk of poor marital quality and subsequent divorce because of the strong relationship with other demographic variables like decreased social economic status, decreased economic success, and decreased levels of education attainment, all of which place the marriage at greater risk (Larson & Holman, 1994). South reported from his analysis of data from two large samples: first, the National Longitudinal Survey of the Labor Market Experience of Youth, a national probability sample of 12,686 civilian and military respondents, and second, the Public Use Microdata Samples from the U.S. Census, that the variable with the greatest power to mediate the ill effects of marrying at a young age is years of school completed. Ironically, he also found that marrying young had a direct impact on an individual's educational attainment. This correlation of early age at marriage with decreased educational attainment kept many from having a higher degree of educational attainment to ward off the effects of marrying at a younger age. This decreased education attainment had a direct impact on the income the couple was able to gain, placing them in a decreased SES. This decreased SES, according to Conger and colleagues (1990), is associated with a decreased degree of marital quality.

Duration of Marriage

In a cross-sectional study Anderson, Russell, and Schumm (1983) found that marital quality decreased early in the marriage about the time of a couple's first child, and continued to decrease to 84.7% of the original score taken from the first few months of marriage. Later in life, as their children were getting ready to leave home, the scores

rose again to 96.3% of the original score. This pattern was confirmed by other cross-sectional studies (Glenn, 1995; Orbuch, House, Mero, & Webster, 1996). On a graph measuring marital quality, this phenomenon created a U shaped curve. This research led to the conclusion that the timing of first and subsequent children was a greater determinant of marital quality than the length of the marriage. However, this U-shaped curve has not been supported by other researchers (Glenn, 1989; McLanahan & Adams, 1989). Glenn (1998) added additional data showing that marital quality tends to quickly regress early in a marriage and then levels out with or without the presence of a child. He took data from five separate cohorts of at least 1,500 individuals each. Taken purely as a cross-sectional study, the U-shape trend was confirmed, but when Glenn (1998) traced each of the cohorts separately, he found a trend of decreased marital quality in each cohort. The appearance of the U-shape trend in the cross-sectional data was caused by an intracohort effect, with the older cohorts reporting higher marital quality and a significant decline in reported marital quality from each subsequent cohort. In addition, Glenn (1998) found that marital quality remained rather constant after a few years into the marriage. This phenomenon of stabilizing with regard to marital quality was confirmed by a study done by Johnson, Amoloza, and Booth. (1992) where they studied five separate dimensions of marital quality over eight years. They found that each dimension's mean, standard deviation, and correlations with each other correlated impressively with the data from subsequent waves. They attributed this steadiness of these correlations to developmental change that rivals the stability of personality characteristics.

Each study shows there is a significant drop in marital quality in the early years of marriage. This phenomenon has been explained by cross-sectional data having an intracohort effect with older cohorts reporting higher marital quality. Since this is also a cross-sectional study, this same effect is expected to be found.

Economic Problems

Economic problems and their effect on families have been studied in several different ways, and each time economic hardships correlate with problems in the family (Kaduschin & Martin, 1981; Rogers & Amato, 1997; Straus, Gelles, & Steinmetz, 1980). Rogers and Amato proposed that the decrease in marital quality was related to changes in the economic context of marriage, such as the loss of wages by men, the large number of women who have joined the work force, and an increase in cohabitation. They used two separate cohorts of married individuals. The first cohort consisted of 914 individuals from the Panel Study of Marital Instability Across the Life Course, a national sample of people who were between 20 and 35 years of age in 1980, with an average age of 27.2. The second cohort sample, consisting of children from the first cohort, consisted of 154 married individuals who were the first cohorts' children, who were people between 20 and 35 years of age in 1992, with an average age of 27.2. In terms of marriage, the first cohort was married between 1969 and 1980 and the second cohort between 1981 and 1992.

Rogers and Amato (1997) used these two separate cohorts to compare changes in time. They found that the younger cohort reported a higher degree of marital problems and decreased marital quality, and that the younger cohort relied on public assistance to a

greater degree. The use of public assistance was significantly related to marital conflict and with less marital interaction (Rogers & Amato). This effect of scarce economic resources for families and decreased marital quality is consistent with the findings of Conger and colleagues. (1990). They found that economic problems indirectly affected the wife's marital quality mediated through the husband's actions, accounting for 51% of the variance in their wives' perceived likelihood of divorce or separation. From Conger and colleagues, the way in which economic hardship affects a marriage is generally as a result of the husband feeling increased strain from supporting a family with few resources, which increased the hostility and decreased the warmth/supportiveness of husbands with regard to their wives. This increase in men's hostility correlates with decreased marital quality for the wives. This important variable of economic problems should also be accounted for because of its effect on marital quality.

Religiosity Belief and Activity

Religiosity has been associated with increased marital quality (Amato & Rogers, 1997). Religiosity has two main components: beliefs and involvement. Booth, Johnson, Branaman, and Sica (1995) reported from their research that individuals reporting higher religiosity also experience a small decrease in the individual likelihood of considering divorce, but reported that religiosity beliefs do not appear to increase the likelihood of higher marital quality, with the exception of religiosity factors that reflect in the individuals actions such as church attendance. For example, church service attendance was associated with an increase in marital happiness. Booth et al. found that this link between religious involvement and marital quality was weak, and the direction of

influence was from marital happiness, which increased religious attendance. Amato and Rogers' work supported the data that frequent church attendance decreased a variety of marital problems and divorce. They account for this through two hypotheses. First, those who attended church had internalized behavioral norms that enhance marital interactions; and second, they were supported and monitored by a community of like-minded individuals.

Walsh (1998) argued that faith, or religious belief, played a more central role in resilience than church attendance. She further asserted that faith is inherently relational, having been shaped within loving relationships. Walsh continued to posit that while religious activities were important, it was the beliefs a person holds that would predict better relationships, hence greater marital quality. She called these transcendent beliefs, which offer meaning and purpose beyond the individual or problems in the present and immediate future. These transcendent beliefs offered the individual resilience in times of hardship and would have acted as a buffer against problems in marriage and mental health issues.

These two perspectives of either religious actions or beliefs having a greater influence on marital quality appear to have little common ground and are tied to very dramatically different views of human nature. For this study, beliefs were predicted to correlate with greater marital quality based on the rationale that they add resilience to the individual and relationship in times of relational problems, and that religious activity has a weak relationship to marital quality. These demographic variables are important to consider because of their correlation with marital quality, and to understand how they may mediate the relationship between marital quality and mental health issues.

Marital Quality and Mental Health Issues

Kessler et al. (1994) described the National Comorbidity Survey as a population-based epidemiological study that sampled 8,098 randomly chosen individuals from the lower 48 states between the ages 15 to 54, and from a noninstitutionalized population. The survey was administered by those outside the field of mental health, and the survey interview was essentially a modified structured psychiatric interview. These interviews were created to discover symptomology that would qualify people for DSM-III-R diagnoses. They found that 48% of those they studied had suffered from at least one psychiatric disorder (Kessler et al.). Throughout their lives people suffer most frequently from substance abuse and dependence (26.6%), anxiety disorders (24.9%), and mood disorders (19.3%). Using data from the same survey, Whisman (1999) found an association between marital quality and these three categories of psychiatric disorders. Whisman reported that both women and men suffering from any mood disorder, any anxiety disorder, and any substance-use disorder reported significantly decreased marital quality than men and women not suffering from any psychiatric disorders.

In an attempt to understand service needs and disabilities associated with mental health problems a separate study by Goering et al. (1996) found from their nonrandom sample of 4000 married individuals, that those who suffered from mental health issues from these three categories were more likely to report poor marital quality. Snyder and Whisman (2004) used a systemic model that accounted for the mutual influence of mental health issues and poor marital quality, influencing each other in a bidirectional and reciprocal fashion. They gave examples of poor marital quality correlating with an

increase in mental health issues. This phenomenon justified a systematic approach, which explained the mutual influence observed. Snyder and Whisman then combined this systemic model with a stress model and explained, "First, relationship distress can increase the probability of onset and prolong the course of mental health problems . . . . Second, the presence of mental health problems can also contribute to increases in relationship distress" (pp. 1-2).

This brings us to question whether the presence of a mental health issue correlates with all close social support relationships, or if it uniquely associates with marriage. This quandary was studied by Whisman et al. (2000). They found the relationship between decreased marital quality and mental health issues continued to be significant even when controlling for the quality of relationships with other relatives and friends. Whisman et al. (2000) explained that considering the nature of marital unions as one of life's most intimate relationships, it was far from surprising that poor marital quality would be associated with mental health issues. From this research, the present study will consider marriage as a relationship that is uniquely tied to mental health problems

Anxiety and Marital Quality

McLeod (1994) reported that there have been few studies on the association between anxiety disorders and marital quality. Dehle and Weiss (2002) sustained this observation, reporting that this relationship was important to understand, but for the most part had gone untested. McLeod reported that what little research that had been attempted on the topic of anxiety and marital quality, had focused almost entirely on women and had ignored men. For this reason, she investigated this association with

couples where one or both of the spouses reported symptoms of anxiety and found these couples reported decreased levels of marital quality. McLeod's study included a sample of 573 couples living in Detroit suburbs who were not Black, selected through a multistage probability sampling procedure. She explained that the geographical area the study took place in was, for the most part, non-Black, and this was the reason for the exclusion of Blacks from the sample. Those from this sample were included if they agreed to be interviewed again two years later, with the addition of a diagnostic assessment and they had continued to be married. The sample used in this study was not widely generalizable due to the exclusion of black individuals and because the study used only those from the previous sample who remained married. She concluded that a causal effect of anxiety assisted in decreasing marital quality for most individuals, but reported there were a few instances in her research that suggested that poor marital quality preceded symptoms of anxiety.

Dehle and Weiss (2002) took this research a step further and investigated how a spouse's self and partner's perception of anxiety was associated with marital quality. They found the husbands' self-reported anxiety correlated highest and most significantly with both the husbands' and wives' marital quality having a negative relationship. This variable alone correlated higher than the husbands' partner-report and wives' self and partner report of anxiety. Dehle and Weiss reported that this was one of a handful of situations where the husbands' responses were more predictive than the wives'. They hypothesized that this unique situation occurred with anxiety in marriage because when women experienced anxiety, it was often comorbid with depression and sadness. These symptoms were more internalized. Men experiencing anxiety tended to experience an

increase in negative affect and negative interactions. These externalizing behaviors from a husband could be interpreted by the wife as negative interaction and may have correlated with reduced marital quality for the wife.

Depression and Marital Quality

With all the associations between mental health issues and marital quality, it is impossible to determine a strict causal connection, nor accurate given a systemic view. In a longitudinal study on marital quality and depression Beach and O'Leary (1993), found that marital distress might precede depressive symptoms. Two hundred sixty-four married couples from New York were recruited through newspaper and radio ads and paid $40 for each assessment they took. Using the Short Marital Adjustment Test, Beach and O'Leary found that decreased levels of marital quality in couples married for 6 months correlated with higher levels of depressive symptoms at 18 months using the Beck Depression Inventory. Beach and O'Leary also found that premarital depression was associated with later deterioration of marital quality for the affected partner and their spouse, giving legitimacy to the claim that depression has a relationship with marital quality.

With regard to this association, the area of current research has centered on the different causal pathways for depression and marital quality for men and women (Fincham, Beach, Harold, & Osborne, 1997). Dehle and Weiss (2002) reported that, before their study, very few studies on depression included both men and women, or even couples. They found that decreased marital quality was associated with depressed mood for both men and women over time, but that this association was higher for women than

for men. Interested in the predictive issues bound up in depression, Fincham et al. sought to find if there existed a more influential point to intervene, and looked at sex as a possible area of influence. They found a significant association between marital quality and depression that were different for women and men. For women, the direction of influence came from marital quality in time one predicted for depression in time two; for men, the progression is reverse, with depression in time one predicting for decreased marital quality in time two (Fincham et al.).

The aforementioned studies examined the individuals' marital quality and depression. Beach, Katz, Kim, and Brody (2002) resolved to discover the systemic effects of each spouse's perceived marital quality and depression on the other. Using a community sample of couples in established marriages Beach et al. found the level of marital quality predicted for depression one year later; this was true not only for the individual but for their spouse as well. The wives' earlier decreased marital quality was associated significantly with the husbands' later depression, and the husbands' earlier decreased marital quality was associated significantly with the wives' later depression. Not only did depression and marital quality correlate with each other within an individual, but the depression or marital quality of one spouse has an influence over the other spouse as well.

Drug and Alcohol Use and Marital Quality

What separates drug and alcohol use from most other mental health issues is that the condition involves an activity, either drinking alcohol or taking drugs. The fact that drug and alcohol use is an act sets this mental health issue apart, giving it a unique

relationship with marital quality in the literature. Leonard and Roberts (1996) observed this association and reported that alcohol's strongest association with poor marital quality was when one spouse drank and the other did not. They explained this phenomenon through the concept of drinking partnerships or, "the interplay of each spouse's drinking context and drinking patterns" (p. 192). They reported that marital quality was consistently high in couples where the frequency of drinking, whether low or high, was similar and done together. Roberts and Leonard (1998) created a study to discover different types of drinking partnerships and their effects on marital quality. They identified five different types and each partnership had a unique association with marital quality. Three groups experienced a higher degree of marital quality and they included: light social drinking, light intimate drinking and frequent intimate drinking. It appears that when a couple drank either very little, or that when they did drink they took part in the activity together, marital quality was higher. Roberts and Leonard found that only when couples drank frequently and apart from one another's company, or if one spouse drank while the other did not, was there an association with decreased marital quality.

Drug use had similar relationship with marital quality. Fals-Stewart, Birchler, and O'Farrell (1999) found that in couples where only one spouse abused drugs, the other spouse reported decreased marital quality, while the drug abusing spouse reported higher levels of marital quality. Over the course of a year, they found that when the days of drug use were reduced, the non-drug-abusing spouse reported higher marital quality. As in the alcohol studies, Fals-Stewart et al. found that marriages reported higher marital quality if both spouses were abusing drugs. They postulated that this finding may arise when substance use by a couple becomes an important shared recreational activity.

Mudar, Leonard, and Soltysinski (2001) set out to discover if this same association would hold up in a study that included both drug abuse and alcohol consumption. Their study included 642 couples and their results confirmed previous studies. Couples with one spouse that used drugs or drank heavily reported decreased marital quality, but marital quality declined even more when frequency of intoxication or drug use was higher. As with previous studies Mudar et al. reported that in their study marital quality was similar between couples where both spouses drank heavily or used drugs, or in couples where neither spouse drank or used drugs. The research appears to support what Roberts and Leonard summarized; alcohol use correlates with marital quality dependent on the couple's unique drinking partnership.

Comorbidity of Mental Health Issues

What complicates the association between mental health issues and marital quality is that the majority of those with mental health issues do not have a clean cut single category for their problems. Data from the National Comorbidity Survey confirms this reporting problem. In individuals suffering from lifetime mental health issues, 44% shared they had only one mental health problem, while 27% report two, and 29% shared three or more (Kessler et al., 1994). Whisman (1999) took this same data and controlled for comorbid disorders, finding that when one disorder is pulled out, the significance falls off. These results shape the opinion that the significant correlations found between mental health issues and marital quality come from individuals with more than one mental health issue.

Conclusion

Based on the research examined within the review of literature it was found that the demographic variables of earlier marriage and economic problems are associated with decreased marital quality. In contrast, the demographic variables of longer duration of marriage and higher religiosity correlate are associated with increased marital quality. The demographic variable of sex in recent research has not correlated with marital quality. Past studies have also revealed a strong relationship with the mental health issues of anxiety, depression, and alcohol and drug use, and marital quality. In this study we expect to have similar results. There are some unique aspects of this study that we hope will add to the greater understanding of marital quality and mental health issues. First, we have separated religiosity into two categories, religious belief and religious activity, to discover if these variables have a unique relationship with marital quality. Second, we are measuring the participants perceived effect the mental health issues have on their marriage. Finally, we are separating out different dimensions of marital quality to discover if each has a unique relationship with the other variables in the study.

Research Questions

This study was created to address three central questions based on the variables of marital quality, mental health issues, and demographic issues. These three questions are:

1. Is there a relationship between sex, age at the time of current marriage, duration of current marriage, economic problems, religious belief, religious activity, and marital quality?

2. Is there a relationship between the mental health issues and marital quality, and the severity of the mental health issues and marital quality?

3. What is the relationship between the demographic variables, mental health issues, and marital quality?

CHAPTER III

METHODS

This chapter will describe the design, sample, procedures, measures, and data analysis that were used in this study, and threats to validity. With this information a clearer understanding can be made for those interested in the study.

Design

A research design using telephone survey interviews selected from random digit generation was used to scrutinize the relationship between marital quality and mental health issues. Babbie (1992) looked at U.S. Census Bureau data and reported that 97.6% of people have telephone service. There is an issue, however, that those with unlisted numbers will not be contacted. Babbie reports that random-digit dialing erases the bias given to those with unlisted numbers, which is the case in the current study. This type of research design is considered a cross-sectional correlational design (Dooley, 2001). This specific design was employed to make clear the relationship between the independent variable (mental health issues), and the dependent variables (marital quality), while allowing for the consideration of the demographic covariates (age of marriage, duration of marriage, premarital cohabitation, public assistance and lower income, and religiosity affiliation and involvement).

For the purposes of this research, a one-time single sample using a cross-sectional design was appropriate. While the research design is appropriate for the study, it does

not completely inoculate the study from threats to validity. These threats to validity will be addressed in reference to this study.

Dooley (2001) stated that reverse causation is a threat to validity in any non-experimental design, suggesting that taking measures at more than one point in time is preferred. This study does not do this and so this research is open to this threat. With this study however, we are only looking at the correlation of the variables and have not proposed a direction of influence.

As defined by Dooley (2001) time threats are changes in outcome variables caused by something other then the independent variables. These variables are at risk when they are measured over time. Time threats that apply to this study include instrumentation and experimenter expectancy. As a threat, instrumentation was controlled by surveys being done from one call center by an experienced data collection agency. In addition, there were weekly meetings to keep data collection consistent across the different callers. The same survey was used for every participant, which is their way to address instrumentation threats to validity. As a threat of validity, experimenter expectancy effects was controlled by having a reputable telephone survey company perform the data collection that was separate from the researchers who develop the study.

Group threats are caused by differences between the groups that could be explained by something other then the research design. Self-selection is the group threat that applies to this study, because a large portion of those selected for the study did not participate. Self-selection is a cause for concern for the research and threatens external validity by limiting the population a study can be generalized to. This is a telephone survey and many people refuse to participate in telephone surveys. In the end, after

eliminating non-working numbers and phone numbers that were not a home residence, about half the people from the random digit dialing sample asked to take the survey actually completed it. This will be kept in mind when reporting the results.

Population and Sample

The Marriage Commission sponsored a statewide survey to assess marital issues. This was a replication of a similar study performed in Oklahoma. The survey population for this study included individuals living in Utah from February to April, 2003. The total sample totaled 1,316 individuals. The initial sample consisted of 1,186 adults from randomly selected households within Utah. This selection was completed from a list of phone numbers created through random-digit dialing across the entire state. On advice from Dan Jones, a well-known pollster, quotas were established for three separate geographical areas: Utah, Salt Lake, and Weber Counties, and the remaining 25 counties. Each of these areas of the state have separate unique population and it was important to get a representative and proportionate sample from each area in order to generalize results for the entire state. A safeguard for the integrity of the random selection was that disconnected or business phone numbers were eliminated. Telephone numbers of the participants were acquired through random digit generation methods using a reputable research sampling company. Random digit dialing gives equal chance to 97.6 of all households in Utah to be selected to participate in the survey. This allows the results from this survey to be generalized to the whole state. The response rate of the random-digit dialing was 30.7%, but after eliminating the phone numbers that were not working and non-home phone numbers, 50.8% of those contacted did complete the survey. An

additional 130 surveys were finished from a random sample created from current Temporary Assistance to Needy Families (TANF) clients to ensure that low-income families were included. From the entire Utah TANF population, 900 potential participants were randomly selected. These potential participants were mailed a letter letting them know they were selected, and if they choose to participate they were instructed to call a toll-free number. In addition, they were told all information they gave would be confidential, and if they completed the survey they would be given $15.00. A total of 152 people responded. Some respondents called after interviewing hours and left a message. Interviewers called these respondents back discovering that five were business numbers, two were non-working numbers, five were contacted six or more times without a response, and one could not finish the survey due to a physical/language problem. Of the 152,139 individuals who began the survey by calling the toll-free number, 130 completed the survey; nine surveys were active when interviewing was stopped. The response rate for the TANF sample was 89.7% after eliminating the non-home and non-working numbers. The cooperation rate was 93.5% after additionally eliminating the respondents with six or more attempted contacts with out success and the one respondent who could not answer the questions due to physical/language problems.

Those selected for this study consisted of a subsample from the larger survey. To be included in this subsample, they had only to report they were currently married. Of the 1,316 participants, 886 indicated they were married and were then included in the current study. Respondents consisted of married individuals ages 18 to 88. The average age of participants was 43.74 and the mode was 42. The average age for males was 45.76 with a *SD* of 16.29. While the average age for females was 42.8 with a *SD* of 15.72. The

average age for women and men was similar as seen in Table 1. The sex of respondents was not representative of the population, and was higher for women who made up 68.6% of the sample, while in the overall population of Utah they make up 49.89% (Smith & Spraggins, 2001).

Each participant was allowed to choose from more than one ethnicity in order to record multiethnic participants. These results are reflected in their response with the sum of each ethnicity being higher than the total sample as seen in Table 2. The largest group of respondents was those who choose the ethnicity of white.

Procedures

Data were collected from a random household sample, between February 25 and April 7, 2003 by the Bureau for Social Research at Oklahoma State University. This survey was a replication of a study done primarily in Oklahoma and 1,000 additional participants randomly chosen from Kansas, Arkansas, and Texas.

Table 1

Description of Sample: Means and Standard Deviations of Age and Sex, and Sex Percentage

Variable	Male (n = 278)		Female (n = 608)	
	M	*SD*	*M*	*SD*
Age	45.76	16.29	42.8	15.72

Table 2

Description of Sample: Ethnicity

Variable	Male (n = 278)		Female (n = 608)	
	n	%	*n*	%
Ethnicity				
White	266	96.38	581	96.51
Hispanic	5	1.81	20	3.32
Black	2	0.72	0	0.00
American Indian	7	2.54	3	0.50
Pacific Islander	2	0.72	3	0.50
Asian	2	0.72	6	1.00
Refused	3	1.09	14	2.33
Total Sample	287*	103.98*	627*	104.16*

* Participants were allowed to select more then one ethnicity

The Bureau for Social Research at Oklahoma State University completed the previous survey; because of their experience and effectiveness it made sense to have the same research group collect data for the current study. The data from the TANF clients were collected between April 8 and April 18, 2003. The survey took between 20 and 30 minutes to complete. The survey was completed with the help of Computer Assisted Telephone Interviewing (CATI) used by the interviewers. The interviewers were selected

from students at Oklahoma State University. The students were hired for their ability to communicate and collect data well. Also, many of these students had collected information with other surveys. The interviewers were comprehensively trained in three phases. The first phase trained new interviewers on basic instructions in survey interviewing. The second phase tested the interviewers on the information from phase one, and then instructed them on how to use the CATI software. In the final phase, interviewers were trained on survey protocol and policies with regard to this specific survey, and went over every survey item. This phase ended with each interviewer practicing giving the survey to another member of the interviewing team. Each interviewer was supervised closely throughout the entire survey process. Calls to all randomly chosen households were attempted a minimum of six times without contact or until data collection ended April 7, 2003. The TANF sample data collection ended April 18, 2003. In most cases, households that declined to participate were called one more time and almost 10% of the total sample was completed during these second attempts. If the potential participant refused again, then they were no longer contacted.

Measures

The survey was given as a telephone interview and included questions from several different content areas. The areas of interest to this study included marriage/divorce history, relationship quality, demographic data, and mental health.

The marriage/divorce history content area had several questions used in this study. These questions inquired on specifics such as current marital status, length of current marriage, and age at the time of current marriage.

Six demographic items were applied to this survey. The participants were asked their age and ethnicity. Gender was recorded but not asked as a question; gender was inferred from voice and recorded by the interviewer. Religious beliefs was measured using the following questions: All things considered, how religious would you say you are? With possible responses being not at all religious, slightly religious, moderately religious, and very religious. Religious activity was quantified by asking: How often do you attend religious services? Would you say… With possible answers of never or almost never, occasionally, but less than once per month, one to three times per month, and one or more times per month. Economic problems was measured by if the participants were from the TANF sample or were using TANF funds.

To assess marital quality the questions came from three separate sources: first, nine questions from a study done by Stanley, Markman, and Whitton (2002); second, five questions from Booth, Johnson, and Edwards's (1983) Marital Instability Index abbreviated version; and finally, two questions from Davis's (1989) questions from the General Social Survey. A factor analysis was completed to discover which parts of marital quality these questions captured, and the questions fell in to three separate components.

These components were commitment and satisfaction; marital instability; and finally negative interactions. Two of the dimensions, marital instability and negative interaction, are completely made from established measures. The first component of commitment and satisfaction factored together at the highest rate (see Table 3) for our sample, and consisted of Stanley et al. (2002) questions on commitment and Davis's (1989) questions on satisfaction. These questions captured the concepts of commitment

Table 3

Summary of Exploratory Factor Analysis Results for Marital Quality Variables

Variable	Variable Name	Factor1	Factor 2	Factor 3
Marital commitment and satisfaction	Togetherness	.79		
	Spouse importance	.79		
	May leave spouse	.77		
	Trapped	.69		
	Friendship	.59		
	Marital satisfaction	.55		
	Marital happiness	.55		
Negative interaction	Negative attribution		.69	
	Criticism		.68	
	Escalating negativity		.68	
	Withdrawal		.64	
Marital stability	Marital trouble			.51
	Discussed divorce w/ friend			.77
	Discussed divorce w/ spouse			.77
	Thought of divorce			.69
	Discussed divorce w/ lawyer			.68

and satisfaction as part of marital quality. It is not surprising that these two aspects of marital quality would measure the same dimension. Amato (2007) explained that the study of commitment is underdeveloped but is as central to understanding marital quality as marital satisfaction. Thus, it would make sense that commitment and marital satisfaction would tap in to similar constructs. All but two items were reverse-scored to aide interpretation so that a higher score meant higher marital quality. The two questions that were not reverse-scored: "I may not want to be with my spouse/partner a few years from now," and "feelings of being trapped" related to the marriage. This question which measured feeling of being "trapped" was not reverse scored based on Amato:

> One can question, however, whether it makes sense to say that people are committed to relationships only because they feel constrained to remain in them. According to this view, actions that reflect commitment are engaged in willingly and reflect more than the existence of internal or external constraints on leaving the relationship. (pp. 61-62)

The second component of marital instability was measured entirely by Booth et al. (1983) Marital Instability Index abbreviated version questions. The questions from this tool also factored well together (see Table 3). These questions were intended to capture the concept of marital stability, yet another important component of marital quality.

The final component of negative interactions consisted of four questions from the Stanley et al. (2002) telephone survey on the topic of negative interactions. Each of these questions also factored together (see Table 3).

It makes sense that these questions correlated well because they tap in to Gottman's (1994) four horseman of negative interaction that predicts for the disruption of marriage and the development of decreased quality in marriage. This component

rounded out the concept of marital quality by looking at the negative aspects of marriage, and not just measuring positive aspects of marital quality like satisfaction and commitment.

Two questions were dropped from this section of the survey. The first question concerned how many weeks had gone by since your last date with your spouse. This question was dropped because it was opened-ended and did not factor well with the Likert-style questions. The second question asked if the participant was glad they were still together, but was only asked to those who reported never thinking of divorce. Participants that reported never thinking of divorce were only a small fraction of the sample, making it impossible to compare their answers to those who reported considering divorce.

The mental health content area asked if they had ever suffered from mental illness, asking if the participants suffered from depression, anxiety, alcohol and drug use/abuse, and other. The survey used the following questions: Now we'd like to ask you a few questions about your health. Have you ever experienced any of the following mental health conditions? Anxiety? Depression? Alcohol or drug problems? Other mental health conditions? The participant could answer yes, no, unsure/don't know, or refused to answer. If their response was other then they were asked to share the other. This measure was chosen for this study because of the problems with diagnosis and those that go undiagnosed. This question has face validity because it asks directly the question we are getting at. Also, Hawthorne (2002) found that self-report of mentally ill patients were preferred in research because assessment from others was not as reliable because it was not consistent from clinician to clinician. The perceived effects of these mental

health issues was assessed through the following questions: How often has your anxiety condition affected your marriage/relationship?; How often has your depression condition affected your marriage/relationship?; How often have your drug or alcohol problems affected your marriage/relationship?; and, How often has your other mental health condition affected your marriage/relationship. Possible answers were rarely or never, occasionally, most of the time, all of the time, unsure/don't know, and refused.

Analyses

To test the first research question regarding the relationship between sex, age at the time of current marriage, duration of current marriage, economic problems, religious belief, religious activity, and the three dimensions of marital quality, an assessment of the separate variables' characteristics and sampling procedures is necessary to discover which statistical analysis would be the most appropriate. First, the independent variables of sex and economic problems are dichotomous (male/female, yes/no). This either/or manner has been recorded as a 0 or 1 giving the variables a rank, thus making them ordinal in nature. Two other independent variables, religious beliefs and religious activity, while having more than one response do not provide an equal interval between possible responses and will also be treated as ordinal factors. Second, the dependent variable of marital quality, though answered as a rank-ordered Likert-style responses, is being treated as interval data, which is the common practice in social sciences. Third, the independent variables of age at time of current marriage, and duration of current marriage are ratio in nature having a starting point of zero and meaningful intervals between each possible response. Fourth, the sampling procedure of random digit dialing used in this

survey gives nearly 98% of the population an equal chance of being included. This random sampling allows us to apply the results to the general population of Utah. Fifth, because this sampling was done as a cross-sectional correlational design, it can reasonably be assumed that the category means are independent of one another (Fox, 1998). This means that the chance of any one participant being selected has nothing to do with the selection of anyone else involved in the survey. Lastly, in order to establish significance *p* must be less then .01 because so many correlations will be completed. This is done in an attempt to limit a type I error, or reducing the change of a false positive finding.

The characteristics of the variables and sample lead to the use of two separate statistical procedures. The variables of sex, economic problems, religious belief, and religious activity correlated with the three dimensions of marital quality require the use of Spearman's Rho. Spearman's Rho is used in situations where one variable is ordinal and the other is ordinal, interval or ratio, and when at least one of the distributions is markedly skewed, which is the case with these variables (Fox, 1998).

The remaining independent variables of age at time of current marriage, and duration of current marriage can easily be correlated with the three dimensions of marital quality using Pearson's *R*. Pearson's *R* was used because the assumptions of a random sample, linear relationship, normal distribution of variables, and interval level variables were met.

To test the second research question regarding the relationship between the three mental health issues and the three dimensions of marital quality, and the relationship between the three mental health issues' perceived effect on marriage and the three

dimensions of marital quality, an assessment of the separate variables' characteristics was necessary to discover which statistical analysis was the most appropriate. Again, the characteristics of the variables and sample led to the use of two separate statistical procedures. The variables of the three mental health issues (ordinal data) and the three dimensions of marital quality (interval data) required the use of Spearman's Rho. The remaining independent variables, the three mental health issues' perceived effect on marriage, were tested with the three dimensions of marital quality using Pearson's *R* since all the variables were interval level data.

The final research question concerning the relationship between the independent variables of the three mental health issues, sex, age at the time of current marriage, duration of current marriage, economic problems, religious belief, and religious activity, and the dependent variables of the three dimensions of marital quality variables required examination to understand which statistical analysis was most appropriate. First, the dependent variable of marital quality remained an interval measurement. Second, the relationship between the variables was linear in nature. Third, the independent variables of mental health issues and different demographic variables did not interact with one another to add any extra effect on the marital quality. Finally, the correlation between the independent variables is low.

Because of these elements involved in this study, multiple regression forcing all of the variables into the equation was used to create a prediction model using the demographic variables and mental health issues with marital quality. The independent variables do not create an additive interaction because there was a linear relationship between the variables, and because multiple regression was robust enough to allow for

some correlation between the independent variables (Fox, 1998). Fox reports that to consider employing multiple regression, the measurements must be interval or ratio in nature. This means that if an ordinal measurement is being used it must have enough levels, which was the case with these variables. The variables of sex and economic hardship were added as dummy variables. Due to the skewed data for religious beliefs and activity they were coded as dummy variables as well. Religious beliefs/activity 1 compared mild beliefs/activity to none reported. Beliefs/activity 2 compared moderate beliefs/activity to none reported, and 3 compared strong reports to none.

CHAPTER IV

RESULTS

This study involved 886 married individuals representative of the state of Utah. The objective of this study was to determine if a relationship exists between marital quality and mental health issues, while accounting for several demographic variables. This chapter will focus on the results of the current study. Each question was tested and the results for each question will be addressed.

To establish further reliability for the three marital quality factors a Cronbach alpha reliability estimate was completed The first component of commitment and satisfaction had the highest coefficient alpha of .86. The second component of marital instability had a coefficient alpha of .83. These questions were also tested by Booth et al. (1983), who reported a reliability coefficient alpha of .75, which was higher than that found in the current sample. The final component, negative interactions, had a coefficient alpha of .69.

Research Question 1

The results of this analysis correlating the demographic variable with the three dimensions of marital quality using Spearman's rho showed a significant relationship with a number of the independent variables. Religious beliefs correlated significantly with commitment/satisfaction, stability, and negative interactions. Religious activity also correlated significantly with commitment and satisfaction, and negative interactions (see Table 4).

Table 4

Spearman's Rho Correlation of Non-interval Level Variables with Components of Marital Quality

	Commitment/satisfaction	Stability	Negative interaction
Sex	.05	.08	-.04
Economic hardship	-.07	-.06	.07
Religious beliefs	.34*	.21*	-.18*
Religious activity	.28*	.15	-.12*
Anxiety	-.06	-.20*	.13*
Depression	-.15*	-.27*	.18*
Drug or alcohol use	-.12*	-.12*	.17*

* $p < .01$

The results relevant to research question one correlating the demographic variables with the three dimensions of marital quality using Pearson's *R* showed only length of current marriage had a statistically significant relationship with the other variables. Specifically, the correlation table shows a relationship with stability, negative interactions, and age at time of current marriage (see Table 5).

Research Question 2

The results of the analyses relevant to this research question using Spearman's rho showed significance in all of the correlations but one, that being the relationship between

Table 5

Correlation Table of Interval Level Dependent and Independent Variables

	1	2	3	4	5	6	7	8
1. Duration of current marriage	—	-.23*	-.09	-.04	.29	-.02	.16*	-.11*
2. Age at time of current marriage		—	-.07	-.15*	-.28	-.07	-.02	.00
3. Anxiety's perceived effect on marriage			—	.65*	.16	-.28*	-.34*	.31*
4. Depression's perceived effect on marriage				—	-.26	-.16*	-.29*	.29*
5. Drug and alcohol use perceived effect on marriage					—	.00	-.03	-.07
6. Commitment/ satisfaction						—	.53*	-.52*
7. Stability							—	-.56*
8. Negative interactions								—

* $p < .01$

anxiety and commitment/ satisfaction (see Table 4). Depression and drug/alcohol use were significantly correlated with commitment/ satisfaction, stability, and negative interaction.

The results of this analysis using Pearson's R showed significance with only two of the independent variables, anxiety's perceived effect on marriage and depression's

perceived effect on marriage. The measures of anxiety's perceived effect on marriage of and depression's perceived effect on marriage, were associated with commitment/ satisfaction, stability, and negative interaction (see Table 5). It should also be noted that there was a statistically significant relationship between the measures of anxiety's perceived effect on marriage and depression's perceived effect on marriage. Another note of interest is that there is a .00 correlation between the perceived effect drug and alcohol use on marriage and marital commitment/ satisfaction. It is unusual to have a .00 correlation with any two variables, but a scatter-plot revealed no discernable relationship.

Research Question 3

The models created through multiple regression for the marital quality dimensions of commitment and satisfaction, stability, and negative interactions were all robust (See Table 6). The marital commitment and satisfaction model had three statistically significant predictors, and the explained variance was .13. The predictors showed decreased commitment and satisfaction if the person was experiencing economic hardship, reported depression, or with increased duration of the marriage.

The marital stability model had six statistically significant predictors, and explained variance was .14. The predictors showed decreased stability if the person reported depression, anxiety, or problems with alcohol or drug use. Respondents reporting moderate religious beliefs compared to no religious beliefs were also predictive of decreased marital stability. In contrast, males and increased length of marriage were both associated with increased stability.

Table 6

Summary of Regression Analysis for Variables Predicting for Three Dimensions of Marital Quality

	Commitment/satisfaction			Stability			Negative interactions		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Sex				.68	.28	.08*			
Economic hardship	-1.02	.43	-.08*						
Age at time of marriage									
Duration of marriage	-.02	.01	-.07*	.03	.01	.14*	-.01	.00	-.08*
Religious beliefs									
Beliefs 1	-1.03	.76	-.08	-1.22	.79	-.08	.01	.34	.00
Beliefs 2	-.40	.76	-.05	-1.40	.71	-.15*	-.10	.30	-.03
Beliefs 3	1.36	.79	.18	.42	.68	.05	-.61	.29	-.18*
Religious activity									
Activity 1	-.41	.59	-.03						
Activity 2	-.11	.58	-.01						
Activity 3	.46	.53	.06						
Anxiety				-.79	.35	-.09*			
Depression	-1.11	.25	-.14*	-1.23	.32	-.15*	.55	.11	.16*
Drug or alcohol use				-1.73	.74	-.08*	1.42	.32	.15*

Note. Dummy variables were used with religious beliefs and activities comparing levels of belief or activity to no beliefs or activity.
R^2 for Commitment/satisfaction = .13; R^2 for Stability = .14; R^2 for Negative interactions = .10
*$p < .05$

Negative marital interactions model had four statistically significant predictors, with an explained variance of .10. The predictors showed increased negative interactions if the person reported experiencing depression or problems with alcohol or drug abuse. Longer durations of marriage and higher religious beliefs compared to no religious belief predicted for decreased negative marital interactions.

CHAPTER V

DISCUSSION

The purpose of this study was to gain a better understanding of mental health issues in association with different areas of marital quality while accounting for influencing demographic variables. This chapter will review the meaning of the results in the context of the previously cited literature, concluding with the limitations and recommendations for future studies.

Research Question 1

The conclusions of this study are described in the same order as the research questions were posed. The first question sought to discover a relationship between sex, age at the time of current marriage, duration of current marriage, economic problems, religious belief, religious activity, and the three dimensions of marital quality. There were no statistically significant associations between sex, age at time of current marriage, economic hardships, and the three dimensions of marital quality. Finding no significant difference between men and women with regard to the three dimensions of marital quality is consistent with the research completed by Williams (2003). She suggests that past differences in marital quality due to sex have disappeared due to the changes in marriages over the past 40 years. As noted earlier, Heaton and Blake (1999) reported that women tend to be more aware of the relational aspects of the marriage, but this may be different from the current conceptualization of marital quality.

While several studies report that early marriage is associated with decreased marital quality (Amato & Rogers, 1997; Martin & Bumpass, 1989; South, 1995), this study did not find this same conclusion. The relationship between marital quality and early marriage was not statistically significant. This may be partially due to the unique demographic variables found in Utah. For example, Schramm, Marshall, Harris, and George (2003) reporting from this same data found that the average age of first marriages was about 3.5 years younger then the national average. In addition, they reported that this younger age at marriage was not associated with higher divorce rates, and that the divorce rate in Utah was less than the national average.

Economic hardships in this study were not statistically associated with marital quality, which is unlike the bulk of research in this area of study (Kaduschin & Martin, 1981; Rogers & Amato, 1997; Straus et al., 1980). These findings may be related to age at marriage. A high percentage of participants identified themselves as a member of The Church of Jesus Christ of Latter-day Saints (LDS; 71.2%). This is a unique demographic and has been found to have increased marital stability as reported by Lehrer and Chiswick (1993). They found that that in relationships where both individuals were members of the LDS Church they had a 13% chance of a marital dissolution compared to the national average of around 50%. The religious homogamy of the state may contribute to the previously cited research and the current results. The religious homogamy may contribute to an effective support group, which serves to buffer the marriage from some of the economic stressors.

There was, however, statistical significance with the relationship between length of marriage, religious beliefs, religious activity, and the three dimensions of marital

quality. A longer duration of marriage was associated with greater marital stability and decreased negative interactions. The findings of strong religious beliefs being positively associated with increased marital commitment/satisfaction and stability, and decreased negative interactions between spouses is consistent with previously cited literature (Amato & Rogers, 1997; Walsh, 1998). The increased duration of the marriage being associated with stability and decreased negative interactions follows a large body of previous research (Anderson et al., 1983; Glenn, 1995; Orbuch et al., 1996). Glenn (1998) found that this effect of longer marriages correlating with increased marital quality was a product of intracohort effect of older cohorts consistently reporting higher marital quality, and a decline in reported marital quality from younger cohorts throughout their marriages. We cannot know if this correlation would help us predict greater marital quality from length of marriage. This result could be a product of an intracohort effect or a selection effect from individuals with lower marital quality divorced so that those that are still married tend to experience higher marital quality. It was predicted that religious beliefs would be associated with greater marital quality, which is thought to be more important than religious activity though they are often related (Walsh). Both religious factors in the current study were associated with increased marital commitment/satisfaction, and decreased negative interaction. It appears likely that this is an result of the highly homogamous religious sample.

Research Question 2

The second question sought to assess the relationship between the three mental health issues and the three dimensions of marital quality. Respondents who reported anxiety had decreased marital quality dimension of marital stability and increased marital quality dimension of negative interactions. There was not a relationship between anxiety and the marital quality dimensions of marital satisfaction/commitment. The statistically significant relationship between anxiety and two of the three marital quality dimensions these results are partially consistent with McLeod (1994) who reported that anxiety over time was associated with decreased marital quality. Anxiety is the only mental health issue from this study that is not associated in a statistically significant way with marital commitment/satisfaction. It may be that negative interactions and stability increase anxiety, but given the data set this relationship cannot be determined.

In contrast, respondents who reported depression predicted for each dimension of marital quality with decreased commitment/satisfaction and stability, and increased negative affect. This association follows what other studies have reported (Beach & O'Leary, 1993; Beach et al., 2003; Fincham et al., 1997). Reporting problems with drug or alcohol use also predicted each dimension of marital quality with decreased commitment/satisfaction and stability, and increased negative affect. This correlation of drug and alcohol abuse with poor marital quality across each of the dimension of marital quality is consistent with the research when one partner has problems with this mental health issue and the other does not (Fals-Stewart et al., 1999; Mudar et al., 2001;

Roberts & Leonard, 1998). From this study it is not known if the participant's spouse engages in alcohol and drug use with them. This information would have been helpful to confirm the findings that there is less of a less negative effect on marital quality when both spouses have similar drinking habits (Leonard & Roberts, 1996). They also reported that poor marital quality is associated with heavy social drinking, which may be the type of drinking captured by a question asking if alcohol or drug use was a problem in their marriage. The current study asked respondents "Have you ever experienced any of the following mental health issues? Alcohol or drug problems?" When they answered yes they were acknowledging they struggled with mental health problems that they attributed to alcohol or drug use. When participants reported anxiety or depression perceived effect on marriage with greater intensity these factors predicted for decreased marital commitment/satisfaction and stability and increased negative interactions. However when participants reported drug and alcohol use perceived effect on marriage with greater intensity there was not predictive power for any of the marital quality dimensions.

The association between reported depression and anxiety was one of the strongest correlations in the study. Given how the questions were asked, it was not possible to determine co-morbidity of mental health issues. The strength of the relationship between depression and anxiety would seem to add credence to the previously published literature (Kessler et al., 1994, Whisman, 1999).

Research Question 3

The goal of the third research question was to discover if there is a relationship between the demographic variables, mental health issues, and marital quality. Given the nature of the data this was best accomplished by performing a series of regressions.

Commitment/Satisfaction

Economic hardship was only statistically significant for predicting decreased marital commitment and satisfaction. This was consistent with the research (Conger et al., 1990). The finding that increased duration of marriage was associated with decreased commitment/satisfaction was partially consistent with the literature (Glenn, 1995; Orbuch et al., 1996). These authors reported that marital quality initially declined but then increased over time, a finding not supported when the scatterplots were reviewed. Reported depression was also negatively associated with decreased quality and stability. As noted earlier in this chapter, this is consistent with the larger body of literature.

Marital Stability

As noted earlier, there were six statistically significant factors in predicting stability. All three of the mental health issues were associated with decreased stability which as previously noted is consistent with the larger body of literature. Being male was associated with higher levels of stability. This is seemingly inconsistent with what was reported by Williams (2003) who found there was no difference in predicting marital quality by sex. She did not, however, assess marital stability. This difference

between men and women with regard to stability seems to follow the research of Heaton and Blake (1999) who set forth that women are more aware of relationships including marriage. If this is the case then men would not be as aware of the stability of the marriage and hence report higher stability. Duration of marriage was associated with higher stability. The research cited in the literature review (Glenn, 1995; Orbuch et al., 1996) showed an initial decline in marital satisfaction but then increased over time. They did not assess stability. It makes sense that a person's commitment to marriage would increase the longer they are married, especially if they are happy as the couples in this sample reported they were as previously noted. It was curious that moderate beliefs, in comparison to no reported religious beliefs, was associated with decreased stability. It seems plausible that having a conflict between religious beliefs and low marital quality may be associated with stability, but the data did not allow for that type of examination.

Negative Interactions

There were four significant predictors for the negative interaction model. Respondents reporting depression or drug/alcohol problems also had higher negative interactions, a finding generally consistent with the literature (Roberts & Leonard, 1998). The reported negative interactions were also decreased with increased duration of marriage and strong religious beliefs. As with stability, it makes sense that negative interactions would go down the longer the person was in the marriage. If the negative interactions kept increasing there would be little, if any, motivation to stay in the marriage. Consistent with Walsh (1998), negative interactions go down with strong

religious beliefs. Negative interactions seem inconsistent with hostility towards a loved one.

Conclusion

Age at the time of marriage as a variable was not a significant predictor for any of the three models. As noted earlier this is inconsistent with the literature and may be related to the findings that on average both men and women marry 3.5 years earlier in Utah than the rest of the United States. Duration of marriage was a statistically significant predictor for commitment and satisfaction, stability, and negative interactions. This result was expected because of the cross-sectional design of the study and follows the trend reported by other studies (Glenn, 1995; Orbuch et al., 1996). This result could also be caused by a selection effect from those who experienced poor marital quality and are now divorced because only married individuals were included in the study. This selection effect would then leave in general individual who experience greater marital satisfaction.

In general, the results across the three research questions are consistent with the literature cited earlier. The inconsistencies seem related to the unique characteristics of the sample. This was a very religiously homogamous sample, and the impact on the variables of interest in this study are not known.

Limitations

Through the course of this study a number of limitations were discovered. First, this study was done with a representative sample from within Utah and the results can

only be generalized to that state. Religious homogamy seems to have played a significant role in a number of the analyses.

The method of gathering data is also a significant limitation for this study. The mental health questions in the survey were left up to the participant's interpretation. We did not know how each participant came to the conclusion that they suffered from a mental health issue. It is not known if they were diagnosed, and if so by whom (doctor, therapist, psychiatrist, self, or friend). There is a major difference between having tendencies related to anxiety, depression, and alcohol/drug use, and having an actual diagnosis.

Another limitation of this study also relates to how the data were gathered. While the sample was randomly chosen, data were only gathered from one spouse. This raises issues relating to reliability of the data as well as data analysis. Gathering data from one spouse, and in this case the majority of the respondents were wives, may introduce a systematic bias. This also limited our ability to compare spouse's responses, which would have added a greater degree of confidence in the study's findings. Finally, the fact that this was a cross sectional study limits our ability to dismiss intercohort effects. By not measuring the same group over time it is not known if generational differences account for divergence with in the sample.

Recommendations and Implications

Based on the limitations found in this study a few recommendations are offered. First, in future studies there is a need to improve the measurement of the mental health issues. It would be helpful to assess who gave the participant the diagnosis they offered

and how that person came to this diagnosis. Second, future studies should include both spouses in order to understand the marital dynamic and sex differences within a marriage. Finally, repeating this same study would allow researchers to rule in or out generational difference in responses within the sample.

It is interesting that the religious factors did not predict in every model especially since this population is very religiously homogamous. It was expected that strong religious beliefs would predict for higher marital quality in each of the dimensions of marriage, but was only predictive in lowering negative interactions. Within the stability model moderate religious beliefs compared to no religious beliefs predicted for lower stability, which decreases marital quality. In addition, religious activity had strong or otherwise did not predict for any of the models of marital quality. It appears the results of this study would imply that for this sample and population religious activity may not protect against decreased marital quality and religious belief is not as strong at predicting overall marital quality.

While this sample has obvious limitations the findings indicate a need for professionals counseling couples or married individuals to understand the predictive value mental health issues have for the different dimensions of marital quality. Therapists with these results can understand which dimensions of the marriage most likely are in need of interventions based on the diagnosis of the individuals in the relationship. For example an individual presenting with anxiety and marital problems may need therapeutic interventions designed to help marital stability. Separate dimensions of marital quality imply that tailored interventions would be more effective for each couple or individual.

This study is important because or the cyclical influence that has been discussed between poor marital quality and mental health issues and the devastating effect both of these problems have on marriage and the lives of individuals. Problems in marriage, if the marriage persists, create problems in each spouses' life and in many cases the lives of their children. Often the marriage through the combination of poor marital quality and mental health issues will end in divorce. Divorce may help end the cycle of poor marital mental health issues and poor marital quality, but these same issues follow the former spouses in their other relationships, divorce often creates entire new problems for each member of the family.

I have personally taken away much to enhance my own personal practice as a clinician of mental health from this study. I feel it is a default way of thinking for myself and often others to want to view the variables in this study as one causing the other. Through the process of understanding the complex concepts in this study have learned to think more in terms of the relationships variables or issues have with one another rather then a causal A brings about B way of thinking. I have also learned to view the relationship of marriage and the quality of marriage as more complicated then how happy you are in your marriage. An individual in marriage may report being very happy, but when asked questions on other dimensions of marital quality may reply that they are involved in a high degree of negative interactions and be in need of interventions. It is for this reason it is important for clinicians to understand that each dimension of marital quality can have a dramatic influence on the marriage.

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